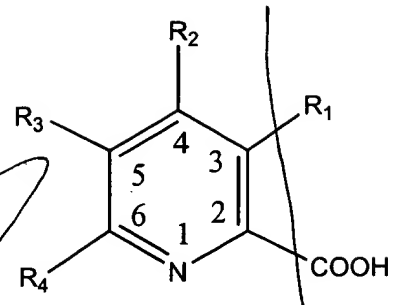


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

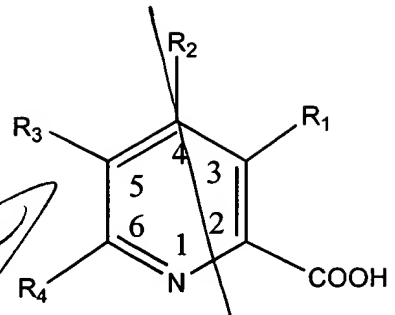
14. The metal ion chelating agent of claim 13 wherein R_3 is a butyl group.

15. The metal ion chelating agent of claim 13 wherein said metal is zinc.

16. The metal ion chelating agent of claim 13 further comprising at least one of a pharmacologically suitable isotonic vehicle, a pharmacologically effective and physiologic saline vehicle and a nebulizing agent.

17. The metal ion chelating agent of claim 13 wherein R_1, R_2, R_3 and R_4 are hydrogen.

18. A pharmacologically active metal ion chelating agent for the treatment of a disease, disorder, or condition selected from the group consisting of hepatitis C infections, angiogenesis, sun burn, inflammation associated with acne, decreased immune function, metastatic colon cancer and upper respiratory infections, wherein the disease, disorder or condition is mediated by a protein having a metal ion-protein complex, the agent having the following structure:



or a pharmacologically acceptable salt thereof,

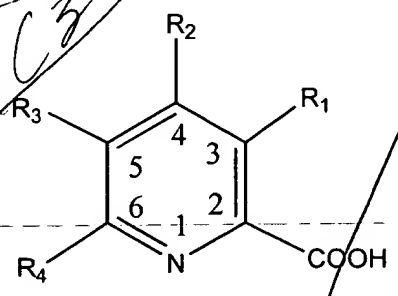
wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

19. The metal ion chelating agent of claim 18 wherein said metal is zinc.

20. The metal ion chelating agent of claim 18 further comprising at least one of a pharmacologically suitable isotonic vehicle, a pharmacologically effective and physiologic saline vehicle and a nebulizing agent.

21. A method for the treatment of at least one disease, disorder or condition selected from the group consisting of decreased immune function, metastatic colon cancer, hepatitis C infections, angiogenesis, sun burn, and upper respiratory infections, comprising the administration of an effective amount of a pharmaceutical composition comprising a metal ion chelating agent represented by the following structure:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

22. The method of claim 21 wherein R_3 is a butyl group.

23. The method of claim 21 wherein said pharmaceutical composition is administered in the range of about 500 mg twice per day to about 2000 mg per day.

24. The method of claim 21 wherein said pharmaceutical composition further comprises a pharmacologically suitable isotonic vehicle.

25. The method of claim 24 wherein said pharmaceutical composition is an intranasal solution comprising in the range between about 0.01 mM to about 50 mM said metal ion chelating agent and at least one said pharmacologically suitable isotonic vehicle.

26. The method of claim 25 wherein said intranasal solution comprises in the range between about 0.1 mM to about 20 mM said agent.

27. The method of claim 26 wherein said intranasal solution comprises about 3mM said metal ion chelating agent.

28. The method of claim 21 wherein said pharmaceutical composition is a systemic medicament comprising in the range of about 1% to about 100% said metal ion chelating agent and a pharmacologically acceptable carrier.

29. The method of claim 28 wherein said pharmaceutical composition is in capsule form.

30. The method of claim 21 wherein said pharmaceutical composition further comprises at least one nebulizing agent.

31. The method of claim 30 wherein said pharmaceutical composition is an inhalant comprising in the range between about 0.001% to about 50% metal ion chelating agent and said nebulizing agent.

32. The method of claim 30 wherein said nebulizing agent is at least one nebulizing agent selected from a group consisting of water and saline.

33. The method of claim 21 wherein said pharmaceutical composition further comprises a topical lotion.

34. The method of claim 33 wherein said pharmaceutical composition is a formulation for the treatment of sunburn and comprises in the range between about 1% to about 99% said metal ion chelating agent and said topical lotion.

35. The method of claim 34 wherein said pharmaceutical composition comprises in the range between about 5% to about 15% of said metal ion chelating agent.

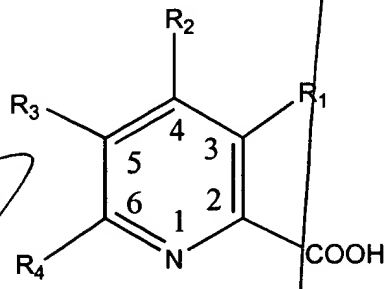
36. The method of claim 31 wherein said pharmaceutical composition is an ophthalmic preparation for the control of angiogenesis and said pharmaceutical composition comprises in the range between about 0.01% to about 99% said metal ion chelating agent and a pharmacologically acceptable carrier.

37. The method of claim 36 wherein said pharmaceutical composition comprises in the range between about 5% to about 10% said metal ion chelating agent.

38. The method of claim 31 wherein R_1, R_2, R_3 and R_4 are hydrogen.

39. A method for the treatment of at least one disease, disorder or condition selected from the group consisting of decreased immune function, metastatic colon cancer, hepatitis C infections, angiogenesis, sun burn, inflammation associated with acne and upper respiratory

infection, comprising the administration of an effective amount of a pharmaceutical composition comprising a metal ion chelating agent represented by the following structure:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine and hydrogen; and

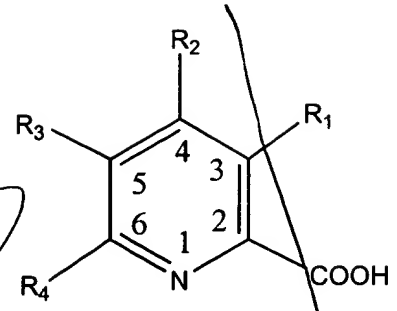
R_3 is a butyl group.

40. The method of claim 39 wherein said pharmaceutical composition further comprises a topical lotion.

41. The method of claim 40 wherein said pharmaceutical composition is a formulation for the treatment of inflammation associated with acne and comprises in the range of between about 1% to about 99% metal ion chelating agent and said topical lotion.

42. The method of claim 41 wherein said pharmaceutical composition comprises in the range of about 5% to about 15% of said metal ion chelating agent.

43. A systemic preparation comprising approximately 1% to approximately 100% metal ion chelating agent and a pharmacologically acceptable route of administration, wherein said metal ion chelating agent is represented by the following structure:



or a pharmacologically acceptable salt thereof,

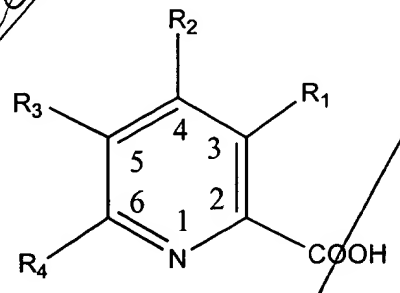
wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

44. The systemic preparation of claim 43 wherein said route of administration is a capsule.

45. The systemic preparation of claim 43 wherein R_3 is a butyl group.

46. The systemic preparation of claim 43 wherein R_1, R_2, R_3 and R_4 are hydrogen.

47. A systemic preparation comprising approximately 1% to approximately 100% metal ion chelating agent and a pharmacologically acceptable route of administration, wherein said metal ion chelating agent is represented by the following structure:

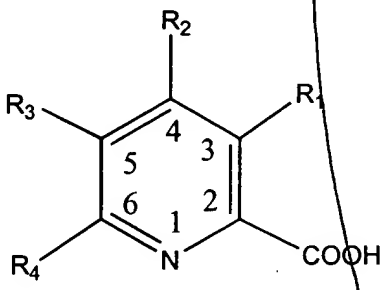


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

48. An intranasal solution comprising in the range between about 0.01 mM to 50 mM metal ion chelating agent and at least one pharmacologically suitable isotonic vehicle, said metal ion chelating agent represented by the following structure:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

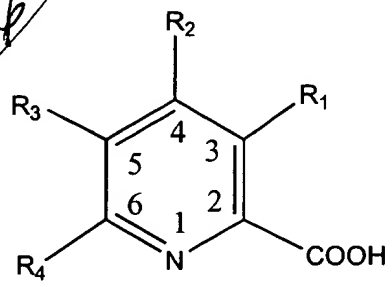
49. The intranasal solution of claim 48 wherein R_3 is a butyl group.

50. The intranasal solution of claim 48 comprising in the range between about 0.1 mM to about 20 mM said metal ion chelating agent.

51. The intranasal solution of claim 50 comprising approximately 3mM of said metal ion chelating agent.

52. The intranasal solution of claim 48 wherein R_1, R_2, R_3 and R_4 are hydrogen.

53. An intranasal solution comprising in the range between about 0.01 mM to about 50 mM metal ion chelating agent and at least one pharmacologically suitable isotonic vehicle, said metal ion chelating agent represented by the following structure:

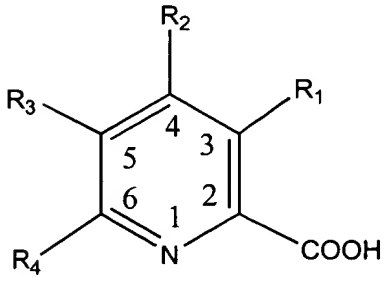


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen;

and R_3 is a butyl group.

54. An inhalant comprising in the range of between about 0.001% to about 50% metal ion chelating agent and at least one nebulizing agent, wherein said metal ion chelating agent is represented by the following structure:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

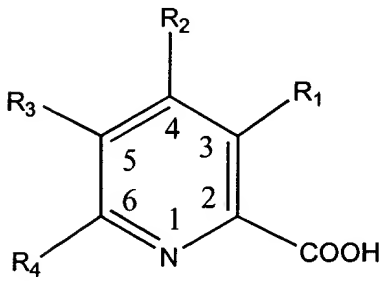
55. The inhalant of claim 54 wherein R_3 is a butyl group.

56. The inhalant of claim 54 wherein said nebulizing agent is at least one nebulizing agent selected from a group consisting of water and saline.

57. The inhalant of claim 54 wherein R_1, R_2, R_3 and R_4 are hydrogen.

58. An inhalant comprising in the range of between about 0.001% to about 50% metal ion chelating agent and at least one nebulizing agent, wherein said metal ion chelating agent is represented by the following structure:

A1 cont.

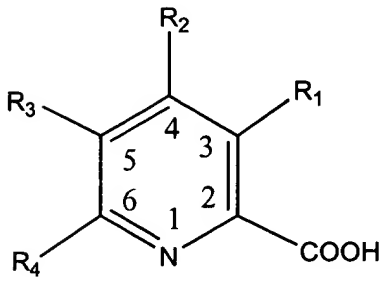


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

59. A formulation for the treatment of sunburn comprising in the range of between about 1% to about 99% metal ion chelating agent and a topical lotion, wherein said metal ion chelating agent is represented by the following formula:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

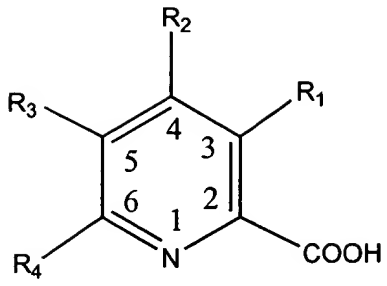
A1 cont.

60. The formulation of claim 59 comprising in the range of between about 5% to about 15% of said metal ion chelating agent.

61. The formulation of claim 59 wherein R_3 is a butyl group.

62. The formulation of claim 59 wherein R_1, R_2, R_3 and R_4 are hydrogen

63. A formulation for the treatment of inflammation associated with acne and sunburn comprising in the range between about 1% to about 99% metal ion chelating agent and a topical lotion, wherein said metal ion chelating agent is represented by the following formula:



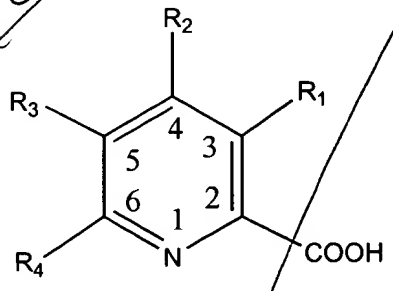
or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

64. The formulation of claim 63 comprising in the range of between about 5% to about 15% of said metal ion chelating agent.

65. An ophthalmic preparation for the control of angiogenesis comprising in the range between about 0.01% to about 99% metal ion chelating agent and a pharmacologically acceptable carrier, wherein said metal ion chelating agent is represented by the following formula:



or a pharmacologically acceptable salt thereof,

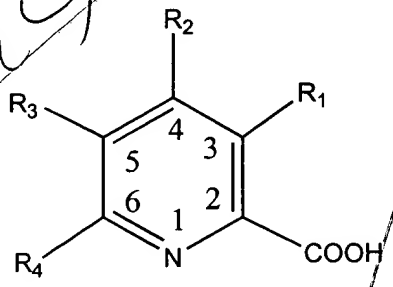
wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

66. The ophthalmic preparation of claim 65 wherein R_3 is a butyl group.

67. The ophthalmic preparation of claim 65 comprising in the range of about 5% to about 10% said metal ion chelating agent.

68. The ophthalmic preparation of claim 65 wherein R_1, R_2, R_3 and R_4 are hydrogen.

69. An ophthalmic preparation for the control of angiogenesis comprising in the range between about 0.01% to about 99% metal ion chelating agent and a pharmacologically acceptable carrier, wherein said metal ion chelating agent is represented by the following formula:

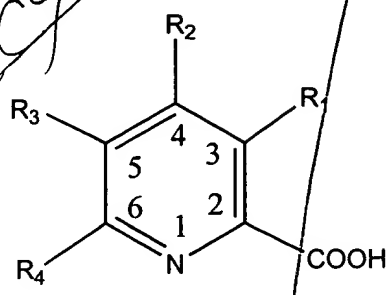


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

70. A lavage comprising up to about 99% of at least one metal ion chelating agent represented by the following structure:



or a pharmacologically acceptable salt thereof,

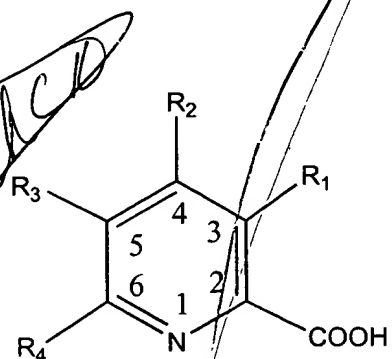
wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

71. The lavage of claim 70 comprising about 20% said metal ion chelating agent.

72. The lavage of claim 70 wherein R_3 is a butyl group.

73. The lavage of claim 70 wherein R_1, R_2, R_3 and R_4 are hydrogen.

74. A lavage comprising up to about 99% of at least one metal ion chelating agent represented by the following structure:

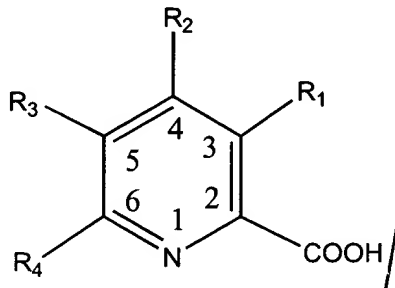


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

75. A preservative comprising less than about 0.025% metal ion chelating agent, said metal ion chelating agent represented by the following structure:



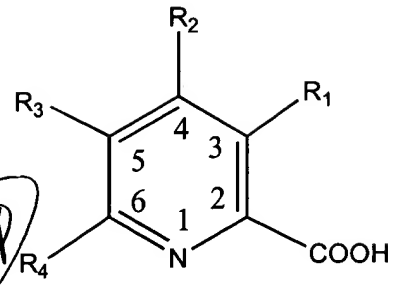
or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

76. The preservative of claim 75 wherein R_3 is a butyl group.

77. The preservative of claim 75 wherein R_1, R_2, R_3 and R_4 are hydrogen.

78. A preservative comprising less than about 0.025% metal ion chelating agent, said metal ion chelating agent represented by the following structure:

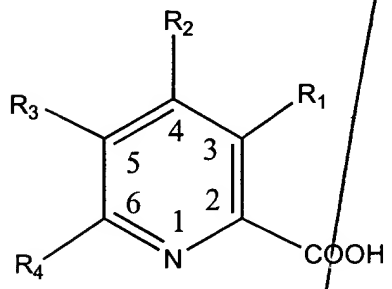


or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen; and

R_3 is a butyl group.

79. A method of preserving an item to be preserved comprising contacting a metal ion chelating agent with said item, said metal ion chelating agent represented by the following structure:



or a pharmacologically acceptable salt thereof,

wherein R_1, R_2, R_3 or R_4 is selected from the group consisting of a peptide of sixteen amino acids, carboxyl group, methyl group, ethyl group, propyl group, isopropyl group, butyl group, isobutyl group, secondary butyl group, tertiary butyl group, pentyl group, isopentyl group, neopentyl group, fluorine, chlorine, bromine, iodine, and hydrogen.

80. The method of claim 79 wherein R_3 is a butyl group.